REMARKS

Claims 1-41 are pending. Claims 1-7 were rejected. Claims 8-41 are allowed. Claim 1 has been amended by the above amendment. The applicants request further examination and reconsideration in view of the amendments made above and the remarks set forth below.

Rejections under 35 U.S.C. § 102(a):

The examiner has rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 6,334,047 issued to Andersson et al. (hereinafter referred to as "Andersson") in view of U.S. Patent Number 6,336,030 issued to Houston et al. (hereinafter referred to as "Houston"). Particularly, the examiner stated that Andersson discloses a method for providing performance control of a transmitted signal. The examiner also stated that Andersson does not specifically disclose the limitation "adjusting power of the transmitted signal in response to the performance parameter of the loopback signal." However, the examiner suggested that Houston does disclose this limitation and that it would have been obvious to modify the Andersson system as taught by Houston.

Claim 1, as currently amended, recites a method of providing performance control of a transmitted signal. The method includes measuring a performance parameter of a received non-communication signal. The method also includes measuring a performance parameter of a loopback signal, the loopback signal comprising a retransmission of the transmitted signal. The method also includes adjusting power of the transmitted signal in response to the performance parameter of the received non-communication signal and in response to the performance parameter of the loopback signal. Thus, claim 1 has been amended to clarify that the loopback signal comprises a retransmission of the transmitted signal. Support for this amendment may be found at least on page 2, lines 8-25 of the applicants' specification.

Andersson discloses an adaptive power control method for providing power control in a mobile communications system. Andersson, title. The mobile communication system includes a plurality of base stations. Andersson, column 7, lines 21-24. Each base station communicates with a plurality of mobile stations via a communication channel. Andersson, column 7, lines 37-41. The mobile stations and base stations employ transmit power controllers to adjust the transmit power of the signal used in the communication channel. Andersson, column 8, lines 15-

37. The transmit power controllers employ a fast power control loop and a slow power control loop. Andersson, column 8, lines 54-67. The fast power control loop consists of: measuring the signal quality of a received signal in the communication channel; comparing the measured signal quality to a target signal quality; and sending transmit power commands to the transmitter of the received signal based upon this comparison. Andersson, column 8, lines 39-45. The slow control loop adjusts the target signal quality in response to quality reports. Andersson, column 8, lines 55-59.

Houston discloses a method and system for providing satellite coverage using fixed spot beams and scanned spot beams. Houston, title. An area is divided into a plurality of coverage areas, each serviced by a spot beam. A single antenna is used to form scanned spot beams and fixed spot beams. Houston, column 7, lines 50-51. Houston, column 4, lines 26-29. The beams are steered by adjusting the amplitude and phase coefficients of the beam forming elements. Houston, column 8, lines 13-27. The beam side lobe levels are monitored and the amplitude coefficients are adjusted to prevent interference with adjacent beams. Houston, column 9, lines 7-11. Each spot beam is divided into a plurality of frequency division channels. Houston, column 5, lines 6-8. Each frequency division channel is divided into a plurality of time division channels. A switch is gated within the time domain to provide precise windows of time for each time division channel. Houston, column 5, lines 29-31. Houston states that "loopback information is included within the transmission to provide necessary synchronization of the user terminals with the satellites." Houston, column 5, lines 31-33.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Manual of Patent Examining Procedure, Section 2141 at Section 2143 (8th Ed. May 2004). The applicants respectfully submit that none of these criteria are met with respect to amended claim 1.

The examiner suggested that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Andersson system as taught by Houston, "to improve communication reliability by feedback information signal in satellite communication system." The applicants respectfully disagree with the examiner's suggested motivation. Houston teaches that its "loopback information" is used for synchronization purposes. However, Houston does not disclose what this "loopback information" is or what it might include. Neither Houston nor Andersson suggest or disclose how Houston's "loopback information," which is used by Houston for synchronization, could be used for controlling power. Therefore, it would not have been obvious to combine Houston and Andersson. Therefore, claim 1 is allowable over Andersson and Houston.

Furthermore, it is an object of Andersson's invention "to provide an adaptive power control technique with a minimal amount of control signaling overhead." Andersson, column 5, lines 39-41. A modification to the system of Andersson that would entail retransmission of a transmitted signal, as with the loopback signal of the applicants' amended claim 1, would increase overhead and thus would be counter to Andsersson's stated goal. Therefore, it would not have been obvious to modify Andersson to employ a loopback signal of the type recited in amended claim 1. This is an additional reason why claim 1 is allowable.

As mentioned, in order to make an obviousness rejection, there must be a reasonable expectation of success. Houston teaches that its "loopback information" is used for synchronization purposes. However, Houston does not disclose what this "loopback information" is or what it might include. Thus, there would be no reasonable expectation that the "loopback information" of Houston could be used to control power, as suggested by the examiner. This is an additional reason why claim 1 is allowable over Andersson and Houston.

As was also mentioned, to establish a prima facie case of obviousness, the prior art references when combined must teach or suggest all the claim limitations. The examiner suggested that Andersson discloses carrier-to-interference ratio performance measurements of a received "loop signal" for a power control loop. As best understood by the applicants, the examiner's reasoning is that because Andersson discloses a control loop that operates on a signal, Andersson discloses a "loop signal." The applicants' submit that Andersson does not disclose a loopback signal that is a retransmission of the transmitted signal as is recited by amended claim 1. In fact, Andersson does not even use the term "loop signal." Houston does not suggest or disclose such a loopback signal either. Instead, Houston discloses "loopback information" which is used for synchronization. Therefore, even when considered in combination, Andersson and Houston do not suggest or disclose all of the limitations of amended claim 1. This is another reason why claim 1 is allowable.

In view of the above, claim 1 as currently amended is allowable. Claims 2-7 are allowable at least because they depend from claim 1.

The applicants respectfully submit that all of the pending claims are now allowable. Allowance at an early date would be greatly appreciated. Should any issues remain, the examiner is encouraged to telephone the undersigned at (408) 293-9000 to discuss the same so that any outstanding issues may be expeditiously resolved.

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